

We claim:

1. A computer-based method of assisting a user to design a network for a group of computers, the method comprising:

- 5 interactively presenting a sequence of questions to the user relating to characteristics of the group of computers and their environment of use;
gathering input data of the user's responses to the questions;
evaluating the input data to determine a prioritized set of network solutions suitable for the group of computers and their environment out of a set of possible network
10 solutions, the set of possible network solutions including at least one hybrid solution employing more than one networking topology type;
presenting one or more of the prioritized set of network solutions for selection by the user; and
in response to the user's selection of a network solution, providing a presentation
15 of a set of network products for constructing a network of the group of computers according to the user-selected network solution.

2. The computer-based method of claim 1 further comprising:

- 20 presenting in the sequence of questions a query prompting entry of a custom name for each computer in the group and identifiers of their respective locations in the environment of use;
gathering the input data including the custom names of the computers in the group and identifiers of their respective locations;
dynamically generating a network diagram graphically depicting the user-selected
25 network solution, including depicting each of the computers in the group, their respective locations and the network products; and
identifying each of the computer in the group and their respective locations on the network diagram by their respective custom name and identifiers, respectively.

30 3. The computer-based method of claim 1 further comprising:

presenting in the sequence of questions a query prompting entry of a custom name for each computer in the group and identifiers of their respective locations in the environment of use;

gathering the input data including the custom names of the computers in the group
5 and identifiers of their respective locations;

dynamically generating setup instructions describing a set of steps to construct the network according to the user-selected network solution; and

identifying each of the computer in the group and their respective locations in the setup instructions by their respective custom name and identifiers, respectively.

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4. The computer-based method of claim 1 further comprising:

dynamically generating a shopping list of the network products needed for construction of the network according the user-selected network solution, and not characterized in the user's responses as already part of the computers.

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5. The computer-based method of claim 1 wherein evaluating the input data comprises:

heuristically identifying a primary computer out of the group of computers based on the input data characterizing each computer's current internet connection type, operating system, and computer type.

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6. The computer-based method of claim 1 wherein the set of possible network solutions comprises wireless, Ethernet, phone-line, and power-line network topologies, as well as hybrid combinations of these network topologies, and wherein evaluating the input data comprises:

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heuristically identifying the set of suitable network solutions out of the set of possible network solutions based on at least a layout pattern of the computers in separate locations in the environment, connection media availability at the locations, and computer type.

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7. The computer-based method of claim 6 wherein the set of possible network solutions further comprises network topology combinations that incorporate internet connection sharing hosted by a primary computer, and other network topology combinations that include a hardware gateway, and wherein evaluating the input data
5 comprises:

heuristically determining whether a hardware gateway is suitable for the group of computers; and

wherein the heuristically identifying the set of suitable network solutions is further based on the determination whether a hardware gateway is suitable.

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8. A computer-based method of assisting a user to design a network for a group of computers, the method comprising:

interactively presenting a sequence of questions to the user relating to characteristics of the group of computers and their environment of use;

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gathering input data of the user's responses to the questions, the input data comprising at least locations of the computers in the environment, availability of connection media at the respective locations, and type of the computers being desktop or mobile varieties;

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evaluating the input data to determine a prioritized set of network solutions suitable for the group of computers and their environment out of a set of possible network solutions, the evaluating comprising heuristically identifying the set of suitable network solutions out of the set of possible network solutions based on at least a layout of the computers in separate locations in the environment, connection media availability at the locations, and computer type;

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presenting one or more of the prioritized set of network solutions for selection by the user; and

in response to the user's selection of a network solution, providing a presentation of a set of network products for constructing a network of the group of computers according to the user-selected network solution.

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9. A computer-readable program carrying medium having a software program of an interactive network guide carried thereon for assisting a user to design a network for a group of computers, the software program comprising:

programming code for interactively presenting a sequence of questions to the user
5 relating to characteristics of the group of computers and their environment of use;

programming code for gathering input data of the user's responses to the questions;

programming code for evaluating the input data to determine a prioritized set of network solutions suitable for the group of computers and their environment out of a set
10 of possible network solutions, the set of possible network solutions including at least one hybrid solution employing more than one networking topology type;

programming code for presenting one or more of the prioritized set of network solutions for selection by the user; and

programming code for providing in response to the user's selection of a network
15 solution, a presentation of a set of network products for constructing a network of the group of computers according to the user-selected network solution.

10. The computer-readable program carrying medium of claim 9 further comprising:

20 programming code for presenting in the sequence of questions a query prompting entry of a custom name for each computer in the group and identifiers of their respective locations in the environment of use;

programming code for gathering the input data including the custom names of the computers in the group and identifiers of their respective locations;

25 programming code for dynamically generating a network diagram graphically depicting the user-selected network solution, including depicting each of the computers in the group, their respective locations and the network products; and

programming code for identifying each of the computer in the group and their respective locations on the network diagram by their respective custom name and
30 identifiers, respectively.

11. The computer-readable program carrying medium of claim 9 further comprising:

programming code for presenting in the sequence of questions a query prompting
5 entry of a custom name for each computer in the group and identifiers of their respective locations in the environment of use;

programming code for gathering the input data including the custom names of the computers in the group and identifiers of their respective locations;

programming code for dynamically generating setup instructions describing a set
10 of steps to construct the network according to the user-selected network solution; and

programming code for identifying each of the computer in the group and their respective locations in the setup instructions by their respective custom name and identifiers, respectively.

15 12. The computer-readable program carrying medium of claim 9 further comprising:

programming code for dynamically generating a shopping list of the network products needed for construction of the network according the user-selected network solution, and not characterized in the user's responses as already part of the computers.

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13. The computer-readable program carrying medium of claim 9 wherein the programming code for evaluating the input data comprises:

programming code for heuristically identifying a primary computer out of the group of computers based on the input data characterizing each computer's current
25 internet connection type, operating system, and computer type.

14. The computer-readable program carrying medium of claim 9 wherein the set of possible network solutions comprises wireless, Ethernet, phone-line, and power-line network topologies, as well as hybrid combinations of these network topologies, and
30 wherein the programming code for evaluating the input data comprises:

programming code for heuristically identifying the set of suitable network solutions out of the set of possible network solutions based on at least a layout pattern of the computers in separate locations in the environment, connection media availability at the locations, and computer type.

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15. The computer-readable program carrying medium of claim 9 wherein the set of possible network solutions further comprises network topology combinations that incorporate internet connection sharing hosted by a primary computer, and other network topology combinations that include a hardware gateway, and wherein the programming code for evaluating the input data comprises:

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programming code for heuristically determining whether a hardware gateway is suitable for the group of computers; and

wherein the heuristically identifying the set of suitable network solutions is further based on the determination whether a hardware gateway is suitable.

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16. A computer-based interactive network guide system for assisting a user to design a network for a group of computers, the system comprising:

a display device;

a processor for executing programming of an interactive network guide; and

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a memory for storing the interactive network guide programming, the

programming comprising:

a questions/data collection user interface component for interactively presenting a sequence of questions to the user relating to characteristics of the group of computers and their environment of use on the display device, and collecting input data of the user's responses to the questions, the input data comprising at least locations of the computers in the environment, availability of connection media at the respective locations, and type of the computers being desktop or mobile varieties;

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an options generator component for evaluating the input data to determine

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a prioritized set of network solutions suitable for the group of computers and their

environment out of a set of possible network solutions, the evaluating comprising
heuristically identifying the set of suitable network solutions out of the set of
possible network solutions based on at least a layout of the computers in separate
locations in the environment, connection media availability at the locations, and
5 computer type;

an options display/selection component for presenting one or more of the
prioritized set of network solutions on the display device for selection by the user,
and receiving the user's selection of a network solution from the prioritized set;
and

10 a network solution output generator for providing, in response to the user's
selection of a network solution, a presentation of a set of network products for
constructing a network of the group of computers according to the user-selected
network solution.

15 17. The computer-based interactive network guide system of claim 16 wherein
the network solution output generator comprises a network diagram generator, a shopping
list generator and a setup instructions generator for dynamically generating a network
diagram, a shopping list of the network products and setup instructions for constructing
the network, respectively.

20 18. The computer-based interactive network guide system of claim 17 wherein:
the questions/data collection user interface component presents in the sequence of
questions a query prompting entry of a custom name for each computer in the group and
identifiers of their respective locations in the environment of use, and collects the input
25 data including the custom names of the computers in the group and identifiers of their
respective locations;

the network diagram generator dynamically generates a network diagram
graphically depicting the user-selected network solution, including depicting each of the
computers in the group, their respective locations and the network products, including

identifying each of the computer in the group and their respective locations on the network diagram by their respective custom name and identifiers, respectively;

the setup instructions generator dynamically generates setup instructions describing a set of steps to construct the network according to the user-selected network solution, including identifying each of the computer in the group and their respective locations in the setup instructions by their respective custom name and identifiers, respectively.

19. The computer-based interactive network guide system of claim 18 wherein the network diagram generator and shopping list generator dynamically generate the network diagram and shopping list, respectively, to include identifiers correlating the depiction of the network products in the network diagram with respective item listings in the shopping list.